ROBERT STEVENSON, Ph. D.

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Mr. John S. Starsiak, Jr. Patent Examiner US PTO Washington, D. C.

May 8, 2003

Dear Mr. Starsiak,

My name is Robert Stevenson. A copy of my resume is attached to provide a convenient introduction. I am writing regarding the attached patent application, which I have reviewed, along with your comments. As an editor of several scientific publications, I occasionally encounter examples such as this where two people disagree about the description of some work. The usual criteria is: 1) Does the description describe the experimental and results in sufficient detail that one can expect to repeat the experiment? 2) Does the description pay proper attention to the prior art including the work of others? 3) Is the report describing something new? Even the smallest degree of novelty is sufficient. Reviewers that attack these criteria need to provide evidence to support the claims.

My impression after reading the patent application is it seems to be a good faith effort to describe a new technology for achieving and controlling chemical separations. The inventor/author is using new materials and principles to fine-tune the separation. His measurements demonstrate that there is an effect, and he offers an explanation and metrics to guide others in duplicating the work. I was able to read the application, and feel that I could duplicate the work. Of course there may be fine points in selecting materials or in duplicating the exact construction, but this is inherent in any replication experiment. I certainly know what I would expect to observe.

Your objections seem to deal with the description of the experiment and often the choice of words. The choice of the term "contour resistor" is descriptive. The figures explain the idea to me. Generally, it is the prerogative of an author to select the name for a new item or concept. Your search did not turn up any conflicting use. This probably indicates that the idea and name are unique, novel and new. If you do not like the name, then you need to suggest and defend an alternative.

The criticism of not showing a pump seems peculiar. People making separations in flowing systems use a variety of pumps. Simple examination of the system shows that one would need a pump with a low flow rate and probably would not require high pressure. Such pumps are usually readily available.

I could go on, but doing so would probably not be productive. It seems that the dispute is over style, rather than substance.

I believe that I am skilled in the art of liquid phase separations, and would be able, with suitable time and resources, to construct an apparatus and then practice the invention.

While I'm not a patent agent or attorney, I do feel that the petitioner has described the construction and operation of a new apparatus for separation of chemicals. Further, I feel that the descriptions offered are sufficient for a skilled person to duplicate his work, and I would expect that they would find similar results. If the results were different, the analysis that the petitioner provides offers strong guidance for discovering the cause of the differences that might be observed. I think that this more than meets the criteria for communicating an invention as required for a patent.

There seems to be no dispute that the system described is novel. It is also clear in my conversations with the petitioner, that he did the work and understands what he did.

I trust that you will use these points in reconsideration of your objections.

Robert Stevenson, Ph. D.

Sincerely

ROBERT STEVENSON, Ph. D.

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OBJECTIVE:

Consulting Opportunities in Bioanalytical Instrumentation and

Supplies

Experience:

1988 to date:

ABACUS Group - Founded consulting practice providing management assistance in business development for firms in separations and analysis. Services include market characterization and marketing strategy, distribution, recruiting, technology evaluation, business planning and acquisitions. The global client list includes: 3M, UOP, Asahi Chemical, W.R. Grace, Rheodyne, Beijing Beifen-Ruili Analytical Instrument Co., Shiseido, MICRA Scientific, Cell Robotics, Ultrasonic Scientific, Gradipore Pty. Ltd., International Scientific Communications, Inc. Bischoff Chromatography, Berger Scientific, Mallinkrodt-Baker Div. of Tyco, Unimicro Technologies, Biosentients, M&S Instrument Trading, Boston Biomedical Consultants.

Lead founding of **China Laboratory**, a Chinese language journal publishing applications oriented articles describing biochemical and chemical analysis.

Member, Scientific Advisory Board, PerSeptive Biosystems, Inc., MICRA Scientific Inc., LC Resources, BioSentients and Cell Robotics, Inc.

Vice President, Treasurer and member of Board of Directors of California Separation Science Society

Separation Science Editor, American Laboratory, American Clinical Laboratory, American Biotechnology Laboratory and American Environmental Laboratory. Originated editorial column "The World of Separation Science" which reports advances in chromatography and electrophoresis and related technology with a strong focus on new instruments and applications.

1987-1988 TOSOHAAS, Philadelphia, PA

MANAGER OF SALES AND MARKETING

*Start up sales and marketing in Europe and North America in biopurification.

1982-1987 BIO-RAD LABORATORIES, Inc., Richmond, CA

MANAGER INTERNATIONAL

*Responsible for Corporate Development function at the Group Level. Participated in several M&A investigations.

* Improved Group's percent of export sales from less than 40% to over 50% in 15 months.

MANAGER OF CHROMATOGRAPHY BUSINESS UNIT

GOAL: Revitalize the chromatography business.

* Repositioned a product line of HPLC columns. Sales increased from less than 200/year to more than 3000 /year in the 2nd year. Bio-Rad became global sales leader.

1980-1982 VARIAN ASSOCIATES, Walnut Creek, CA

PRODUCT MANAGER, CHROMATOGRAPHY COLUMNS AND CHEMICALS

<u>GOAL:</u> Reverse a declining position in chromatography consumables: Sales trebled in second year.

1978-1980 CHROMATRONIX, INC., Palo Alto, CA

PRESIDENT and FOUNDER of firm manufacturing and marketing special purpose analyzers and purifiers to numerous accounts in the Soviet Union.

1977-1978 ALTEX SCIENTIFIC, INC., Berkeley, CA

VICE PRESIDENT OF RESEARCH for a firm that exploded into second place in a rapidly growing, competitive HPLC market.

* Managed column manufacturing that grew more than 10 times in two years, improved gross margin 6% in 7 months.

* Solely responsible for highly successful market development program in Japan, Republic of China and USSR.

1969-1977 VARIAN ASSOCIATES, Walnut Creek, CA

MANAGER OF HPLC RESEARCH AND DEVELOPMENT PRODUCT LINE MANAGER FOR HPLC SENIOR CHEMIST, HPLC

1966-1969 SHELL DEVELOPMENT COMPANY

Senior Chemist characterized heterogeneous catalysts utilizing a variety of chemical and spectroscopic probes.

Ph. D. in Analytical Chemistry University of Arizona in 1966.

B.A. in Chemistry Reed College in 1963.

Additional courses toward M.B.A., Biochemistry.